

NOTES ON THE SUBSPECIES OF *NUMENIUS*
AMERICANUS BECHSTEIN.

BY HARRY C. OBERHOLSER.

THE description by Dr. Louis B. Bishop of a new race of *Numenius americanus*¹ has drawn recent attention to this species. The present writer's work on the identification of the examples of this curlew from Texas and other localities in the collection of the Biological Survey in the United States National Museum serves to confirm Dr. Bishop's subspecific separation of the small race inhabiting the northern United States and southern Canada. Furthermore, this investigation has brought out some interesting points, particularly in the geographic distribution of the two forms, which did not appear in the original account of this new subspecies, and which now seem worth while placing on record.

In this connection we have examined a total of 279 specimens, which represents the combined series of the United States National Museum, including the Biological Survey, the Museum of Comparative Zoölogy, the Academy of Natural Sciences of Philadelphia, the American Museum of Natural History, and the Brooklyn Museum of Arts and Sciences; together with the private collections of Mr. John E. Thayer, Mr. William Brewster, Mr. A. C. Bent, Dr. Jonathan Dwight, Dr. Louis B. Bishop, and Dr. L. C. Sanford. To the authorities of the above mentioned museums and to the other gentlemen who have kindly placed material at our disposal we wish here to express our sincere thanks. We are also indebted to Mr. Charles Chubb of the British Museum for measurements of birds in the collection of that institution, which have made possible the subspecific identification of important specimens at present unavailable for our examination.

***Numenius americanus americanus* Bechstein.**

N[umenius]. americanus BECHSTEIN, in Latham, Allgem. Uebers. Vögel, IV, ii, 1812, p. 432 (New York and Hudson Bay).

¹ *Numenius americanus parvus* Bishop, 'The Auk,' XXVII, No. 1, January, 1910, p. 59.

Numenius longirostra WILSON, Amer. Ornith., VIII, 1814, p. 23, pl. XLIV, fig. 4 (coast of New Jersey).

Numenius melanopus VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 306 (New York and Hudson Bay) (description based on the specimen described by Latham in Gen. Syn. Birds, III, part 1, 1785, p. 120, which came from New York; the Hudson Bay reference belongs probably to *Numenius hudsonius*).

CHARS. SUBSP.—Size large, particularly the bill and wing.

MEASUREMENTS.¹—Male: wing, 268–281 mm.;² tail, 109–128 (average, 121); exposed culmen, 139–155 (148); tarsus, 78–90.5 (86.5).

Female: wing, 268.5–298 (average, 286) mm.; tail, 121–136 (126); exposed culmen, 166–222 (196); tarsus, 83–92 (88).

TYPE LOCALITY.—New York.³

GEOGRAPHIC DISTRIBUTION.—Western United States (excepting the northernmost part) and Mexico to Guatemala. Breeds in the middle and western United States, north to southern Michigan (once at Jackson), southern Wisconsin (formerly), northern Iowa (formerly), southern South Dakota, southern Wyoming, and southern Idaho; west to central southern Idaho and northeastern Nevada; south to central Utah, central New Mexico, northwestern Texas (casually to southeastern Texas), and northern Oklahoma; east to southeastern Kansas (Neosho Falls, formerly), southeastern Iowa (formerly), and northern Illinois (formerly). Winters in the southern United States and Mexico, north to central California, southern Arizona, southern Texas, and Georgia; and south to southern Lower California, Oaxaca, Dueñas in Guatemala, and Cozumel Island, Yucatan. Migrates east to southern Ontario, southern Quebec, New Brunswick, Nova Scotia, and Newfoundland, and southward over the eastern United States. No certain record for the West Indies.

Remarks.—This is one of the shore birds that have greatly decreased during the last decade. It has disappeared entirely as a breeder from Michigan, Wisconsin, Illinois, Iowa, eastern Nebraska, and at least eastern Kansas; and also has become very rare, probably a mere straggler, as a migrant in the United States east of the Mississippi River, whereas it was formerly a common transient along the Atlantic Coast north at least to Massachusetts. The above-mentioned breeding of this species in Michigan is based on a set of eggs without date, now preserved in the United States

¹ Transposed into millimeters from the measurements given by Dr. Louis B. Bishop, in 'The Auk,' XXVII, No. 1, January, 1910, p. 60.

² The average given by Dr. Bishop for the wing measurements of the male of this form is evidently an error.

³ Designated by the American Ornithologists' Union Committee, Check-List of North American Birds, edition III, 1910, p. 124.

National Museum, which was collected by Mr. C. P. Davis at Jackson, Michigan. This seems to be the only authentic instance of its breeding in the State of Michigan. The breeding record from Neosho Falls, Kansas, above noted, is also authenticated by a set of eggs now in the United States National Museum, collected by Capt. B. F. Goss. A specimen obtained by Dr. E. A. Mearns at Cloverdale, New Mexico, on the Mexican Boundary Line, July 14, 1892, is a long way south of the southernmost part of the breeding range of this form, and, as will be noted, is indication that this species starts very early on its southward migration.

Specimens examined.— Altogether 89 examples of this subspecies have been examined, from the localities that follow:

Arizona.— Peck's Lake, Upper Verde Valley (April 20, 1886); Sonoyta Plains (August, 1901); Fort Verde (Nov. 8, 1886); near Naris, Pima County (Jan. 8, 1894).

California.— Monterey (Nov. 16, 1912); Berkeley (April 23, 1898); Hyperion, Los Angeles County (June 4, 1917); San Francisco; San Diego.

Colorado.— Spanish Peak (April 17, 1877).

Florida.— Tarpon Springs (Sept. 7, 1889; July 5, 1888); Gasparilla (Feb. 6, 1884).

Georgia.— Savannah (January, 1860); Sapelo (Nov. 19, 1887).

Idaho.— Dickey (June 8, 1912); American Falls (May 27, 1911).

Illinois.— Oaka (April 20, 1881).

Iowa.— Dickinson County (June 10, 1881).

Kansas.— Fort Hays (June 12, 1871).

Massachusetts.— Eastern Massachusetts (1847).

Missouri.— Near Snatch Creek (June 7, 1864).

Nevada.— Franklin Lake (June 24, 1898).

New Jersey.— Cape May (Sept. 14, 1880).

New Mexico.— Raton (May 10, 1901); Cloverdale, Mexican Boundary Line (July 14, 1892).

New York.— Bought in New York City (April 7, 1879); near New York (1841).

South Carolina.— Hilton Head (April 1, 1864).

South Dakota.— White River.

Texas.— Valentine (Aug. 12, 1902); Padre Island (Aug. 21, 1891); Point Isabel (Feb. 19, 1881; March 5, 1881); High Island

(Dec. 19, 1916); Rockport (Feb. 28, 1896); Nueces County (Oct. 9 and 10, 1912; Nov. 23 and 24, 1912); Corpus Christi (Sept. 16, 1886; May, 1882; Feb. 12, 1899; Mar. 12, 1899; Oct. 20 and 24, 1909); Brownsville (Feb. 3, 1897; Sept. 8, 1893; Nov. 9 and 10, 1914; Sept. 26, 1914; Dec. 11, 14, and 22, 1909; Nov. 18, 1909).

Utah.—Fairfield (July 28, 1890); Duckville Gun Club, mouth of Bear River (June 7, 1916); Hansen's Island, mouth of Bear River (May 29, 1916); south shore of Great Salt Lake (June 11, 1869); Antelope Island, Great Salt Lake (June 4 and 5, 1869).

Virginia.—No more definite locality given (March, 1872).

Wyoming.—Laramie Peak (June, 1864).

Lower California.—Mouth of Colorado River (May 15, 1915); La Paz (March 12, 1912; Feb. 7, 1887); San Quintin (July 4, 1906); Abreojos Point (March 16, 1911); San José del Cabo (Aug. 26, 1887).

Oaxaca.—Near Juchitan (Dec. 11, 1868).

San Luis Potosi.—San Luis Potosi (Feb. 7, —).

Tamaulipas.—Matamoros (Feb. 11, 1909).

Vera Cruz.—Jalapa; Tlacotalpam (Feb. 10, 1901).

Numenius americanus occidentalis Woodhouse.

Numineus [sic] *occidentalis* WOODHOUSE, Proc. Acad. Nat. Sci. Phila., 1852, p. 194 (near Albuquerque, New Mexico).

Numenius americanus parvus BISHOP, 'The Auk,' XXVII, No. 1, January, 1910, p. 59 (Crane Lake, Saskatchewan).

CHARS. SUBSP.—Similar to *Numenius americanus americanus*, but decidedly smaller, particularly the bill and wing.

MEASUREMENTS.¹—Male: wing, 253.5–261 (average, 259) mm.; tail, 105–117 (112); exposed culmen, 106–145 (121); tarsus, 70–81 (74).

Female: wing, 252–275 (average, 266) mm.; tail, 104.5–116 (111); exposed culmen, 118–162 (147); tarsus, 73–88 (80).

TYPE LOCALITY.—Near Albuquerque, New Mexico.

GEOGRAPHIC DISTRIBUTION.—Southwestern Canada, the United States, Mexico, and Jamaica. Breeds north to southern Manitoba, southern Saskatchewan, southern Alberta, and southern British Columbia; west to central southern British Columbia, middle Oregon, and central northern

¹ Transposed into millimeters from the measurements given by Dr. Louis B. Bishop, in 'The Auk,' No. 1, January, 1910, p. 60.

California; south to northeastern California, central western Nevada (probably), southeastern Oregon, northern Idaho, southwestern Montana, central Wyoming, and northern South Dakota; east to northeastern South Dakota, eastern North Dakota, and central southern Manitoba. Winters in Mexico and the southern United States, north to central California, southern Arizona, southern Texas, southern Louisiana, Florida, and Georgia; and south to southern Lower California, Jalisco, and San Luis Potosi, Mexico. Migrates west to western Washington and western California, and east to Iowa; casually east to Rhode Island, New York, and South Carolina, and southeast to Jamaica.

Remarks.—This is a well differentiated subspecies, although its distinction rests entirely on size, the much shorter bill being one of the best and most readily appreciated characters. While typical specimens are easy to determine, geographic intermediates, such as occur in Wyoming and South Dakota, offer, as would be expected, sometimes difficult problems which are solvable only by average measurements or the average of characters present. An adult specimen taken at a nest near Fort Klamath, Oregon, on May 17, 1878, and now with a set of four eggs preserved in the United States National Museum, is apparently typical *Numenius americanus occidentalis*, and thus proves the southward extension of the breeding range of this form, as far at least as extreme northeastern California. It is probable that the curlews that breed in the lakes of the Carson Valley of central western Nevada, although not examined in this connection, are also of this race. No specimens of *Numenius americanus occidentalis* from south of the State of Jalisco in Mexico have been seen, but it doubtless will be found at least nearly as far south as the typical subspecies, i. e., to southern Mexico, and possibly to Guatemala.

In describing this race as *Numenius americanus parvus*,¹ Dr. Louis B. Bishop rejected the name *Numenius occidentalis* Woodhouse because he assumed that it was evidently an immature individual of *Numenius americanus americanus*, basing this assumption largely on the premise that it must have been collected before August 1. As a matter of fact, however, the type of *Numenius occidentalis* Woodhouse was collected near Albuquerque, New Mexico, on Aug. 20, 1851, by Dr. S. W. Woodhouse. It was

¹ 'The Auk,' XXVII, No. 1, January, 1910, p. 61.

deposited in the United States National Museum, where it was catalogued as No. 12644, and was subsequently mounted, but was unfortunately destroyed by mistake in March, 1888, along with a number of other supposedly worthless specimens. We have, however, a figure of the type specimen which was given by Woodhouse in his report on this collection;¹ and from this, together with the description and measurements given by Dr. Woodhouse,² it is evident that the bird is a representative of the small northern race subsequently described by Dr. Bishop as *Numenius americanus parvus*. These measurements are, in inches, as follows: wing, 11.50; bill, 4.20; tarsus, 2.80; middle toe, 1.35. That this individual should be found in New Mexico as early as Aug. 20 is by no means surprising or indicative of its identity with *Numenius americanus americanus*, since these birds are notoriously early migrants and move southward not infrequently in July. Examples of *Numenius americanus occidentalis* have been obtained in southern California on August 22, and on the island of Jamaica in July; while, as already noted,³ *Numenius americanus americanus* sometimes reaches the Mexican Boundary as early as the middle of July. We are therefore under the unfortunate necessity of sinking Dr. Bishop's name, *Numenius americanus parvus*, as a synonym of *Numenius americanus occidentalis* Woodhouse.

Specimens examined.—We have seen 190 specimens of this subspecies, from the following localities:

Alberta.—Many Island Lake, near Walsh, June 18, 1906 [nestling and adult]; Walsh (July 12, 1906 [juv.]); Calgary (May 18, 1904); western Assiniboia (June 1, 1905).

British Columbia.—Vernon (July 20, 1892); Lac La Hache (June 29, 1892); Okanagan (July 22, 28, and 29, 1902; Oct. 29, 1902; July 14, 1911).

Saskatchewan.—Hay Creek, Maple Creek (July 3, 1906); Hay Lake (May 29, 1905); Maple Creek (June 11, 1906); Crane Lake, Maple Creek (June 17, 22, 23, and 26, 1906; June 17, 1907); Big Stick Lake, Maple Creek (July 18, 1906; June 13, 1906).

¹ Sitgreaves' Rep. Zuni and Colorado Rivers, 1853, p. 98, pl. 6.

² *Loc. cit.*, p. 98.

³ *Antea*, p.

Arizona.—Near Naris, Pima County (Jan. 8, 1894); The Dam, Monument 179, Mexican Boundary Line (Feb. 9, 1894).

California.—Menlo (January, 1896); San Rafael (Jan. 6, 1883); Huntington Beach, Orange County (Aug. 22, 1915).

Colorado.—Larimer County (May 9, 1885); St. Charles River (Aug. 5, 1874); Denver Mills (Sept. 8, 1900).

Florida.—Gasparilla Pass (Feb. 5, 1884).

Georgia.—Sapelo Island (May 9, 1885).

Iowa.—No more definite locality given; Chariton (Mar. 21, —).

Louisiana.—Calcasieu Pass.

Missouri.—Bourbeuse River (Aug. 1, 1881).

Montana.—Pilgrim Creek, 10 miles northwest of Piniele (June 19, 1916); Pilgrim Creek, 6 miles northwest of Piniele (June 11, 1916); 5 miles southeast of Sykes (May 31, 1916); Bighorn River, 5 miles south of St. Xavier (May 31, 1917); Crazy Mountains, eastern foothills (June 21, 1917); 90 miles above mouth of Yellowstone River (July 28, 1856); Darnall's, Dawson County, 30 miles south of Glasgow (June 30, 1910); Mountain Sheep Buttes, 20 miles northwest of Colypso, Dawson County, (Aug. 9, 1909); near mouth of Milk River (July 31, 1874; June 30, 1874); mouth of Little Porcupine River (Aug. 8, 1875); Fort Benton; Powder River, 10 miles northeast of Broadus (June 19, 1916); Boxelder Creek, 10 miles northeast of Piniele (June 10, 1916); Boxelder Creek, 12 miles northeast of Piniele (June 10 and 19, 1916).

Nebraska.—No more definite locality given.

New Mexico.—Ten miles northwest of Capitan Mountains (Aug. 28, 1903); Mexican Boundary Line, Long. 30° 15', near Emory Monument 5 (Mar. 22, 1892).

New York.—Montauk Point.

Oregon.—Pendleton (June 6, 1896); Fort Klamath (shot at nest containing 4 eggs, May 7, 1878).

Rhode Island.—Jamestown (Sept. 9, 1897).

South Carolina.—Egg Bank, Ladies Island (May 27, 1867).

South Dakota.—Cheyenne River, Custer County (July 12, 1894); Spring Creek, Custer County (May 27, 1894).

Texas.—Nueces County; Sept. 14, 1912; Oct. 9, 10, 11, 19, 24, 25, and 26, 1912; Nov. 17, 19, 21, 22, 23, 25, 28, and 29, 1912);

Nueces Bay (April 5 and 12, 1889); Corpus Christi Bay (April 13, 1889); Brownsville (Dec. 11, 1888; May 16, 1877; Feb. 3, 1897; Nov. 20, 1896; Dec. 4, 5, 7, 9, 14, 15, 16, 18, 19, 21, and 22, 1909; Dec. 2, 1887; Nov. 8, 16, 19, and 27, 1909; Feb. 21, 1902; Jan. 6, 1899; Sept. 19, 22, 24, and 25, 1914; Sept. 8, 1893; Oct. 1, 2, 5, and 7, 1914); Cameron County (Oct. 7, 1913; Oct. 1, 1914); Point Isabel (Feb. 18, 1881); Fort Clark (Feb. 22, 1893); Fort Stockton (Aug. 30, 1877); Aransas County (Sept. 3, 5, 8, and 22, 1912); Corpus Christi (March 10, 1877; May 29, 1891; Feb. 12, 1899; Oct. 11 and 18, 1909).

Utah.—Fillmore (Nov. 19, 1872).

Washington.—Near Fort Steilacoom (Aug. 1, 1856); Fort Sanders.

Wyoming.—Little Box Elder Creek, Converse County (June 25, 1890; April 25, 1892); Crook County (June 14, 1904); Newcastle (May 22, 1894); Black Hills (Aug. 4, 1856); Main Fork, Medicine Bow River (Aug. 6 and 7, 1856).

Chihuahua.—Chuechupa (Sept. 16 and 17, 1905); Nuevo Casas Grandes (Sept. 4, 1901).

Durango.—Rancho Santuario (Feb. 22, 1903).

Jalisco.—La Barca (Jan. 8, 1903).

Jamaica.—Passage Fort (July, 1863).

Lower California.—Cape San Lucas (Sept. 15, 1859); La Paz; San José del Cabo (Sept. 19, 1887; February, 1860); San Lazaro Mountains (January, 1860); Magdalena Bay (March 21, 1911); San Quintin (July 7, 1906).

San Luis Potosi.—San Luis Potosi (March 3, —).

Tamaulipas.—Matamoros (Jan. 23, 1909).